

IN THE CLAIMS

Please **amend** claims 1, 3, 4, 6-9, 12, 13, 15, and 16 and **cancel** claim 2 without prejudice as shown in the Summary of the Claims, *infra*. Added matter is underlined and deleted matter is struck-through.

Amendments are made without the intention of surrendering equivalents to the subject matter.

SUMMARY OF THE CLAIMS

Claim 1 (currently amended). An image processing device comprising:

comparing means for comparing a value S corresponding to a sum of a total density difference of two kinds of sub mask pixel groups in a main scanning direction and a total density difference of two kinds of sub mask pixel groups in a sub scanning direction with a threshold value, the sub mask pixel groups being provided in a main pixel group constituted by a plurality of pixels including a target pixel, and

area determination means for for making area determination determining whether if said target pixel is an edge area or not based on said comparison, upon area determination of said target pixel in an inputted image data.

Claim 2 (canceled).

Claim 3 (currently amended). The image processing device as defined in claim 1, wherein normalization is performed with a coefficient when said sub mask pixel groups are different in size from one another.

Claim 4 (currently amended). The image processing device as defined in claim 1, wherein said sub mask pixel groups are disposed on or around an end of said main pixel group.

Claim 5 (canceled).

Claim 6 (currently amended). The image processing device as defined in claim 1, wherein in said main pixel group, a main scanning complication degree is computed by summing density differences between adjacent pixels or pixels disposed with a fixed interval in a main scanning direction, and a sub scanning complication degree is computed by summing density differences between adjacent pixels or pixels disposed with a fixed interval in a sub scanning direction, and area determination is further made based on the computing result.

Claim 7 (currently amended). The image processing device as defined in claim 6, wherein after determination is made based on the value S if the target pixel is an edge area or not, a difference is computed between the main scanning complication degree in a main scanning direction and the sub scanning complication degree in a sub scanning direction regarding a non-edge area, and determination is made again if the target pixel is an edge area or not based on the computing result.

Claim 8 (currently amended). The image processing device as defined in claim 6, wherein after determination is made based on the value S if the target pixel is an edge area or not, a total of the main scanning complication degree in a main scanning direction and the sub scanning complication degree in a sub scanning direction is computed regarding a non-edge area, and determination is made again if the target pixel is a dot-mesh dot area corresponding to an image area or a non-edge area based on the computing result.

Claim 9 (currently amended). The image processing device as defined in claim 6, wherein the main scanning complication degree in a main scanning direction is a total of density differences of every other pixel, and the sub scanning complication degree in a sub scanning direction is a total of density differences of adjacent pixels.

Claim 10 (original). The image processing device as defined in claim 1, wherein an average density or a total density of said main pixel group is computed, and determination is made based on the computing result if the target area is an edge area or not.

Claim 11 (original). The image processing device as defined in claim 10, wherein upon computing an average density of said main pixel group, a total density is not divided by the number of pixels but by a power of 2 being the closest to the number of pixels.

Claim 12 (currently amended). The image processing device as defined in claim 12, wherein when determining if a target pixel is an edge area or not based on a total density of said sub pixel groups, after determination of an edge area is successively

made for a predetermined times or with a predetermined frequency, a threshold value for determining if the target pixel is an edge area or not is changed.

Claim 13 (currently amended). The image processing device as defined in claim 1, wherein when performing ~~upon~~-area determination, a plurality of determining operations are performed in a predetermined order.

Claim 14 (original). The image processing device as defined in claim 13, wherein determination is made based on a computing result of an average density or a total density of said main pixel group, before determination based on the value S, determination based on a difference between the complication degrees in a main scanning direction and in a sub scanning direction, and determination based on a total of the complication degrees in a main scanning direction and in a sub scanning direction.

Claim 15 (currently amended). The image processing device as defined in claim 13, wherein determination is made in an order of:

- determination based on a computing result of an average density or a total density of said main pixel group,
- determination based on the value S,
- determination based on a difference between the complication degrees in a main scanning direction and in a sub scanning direction, and
- determination based on a total of the complication degrees in a main scanning direction and in a sub scanning direction.

Claim 16 (currently amended). The image processing device as defined in claim 1, wherein area determination is determined by methods that are executed in parallel, wherein said methods include:

- determination based on a computing result of an average density or a total density of said main pixel group,
- determination based on the value S,
- determination based on a difference between the complication degrees in a main scanning direction and in a sub scanning direction, and

determination based on a total of the complication degrees in a main scanning direction and in a sub scanning direction.

Claim 17 (original). The image processing device as defined in claim 16, wherein said area determination made in said parallel operation uses a truth table.

Claim 18 (previously presented). An image processing device as recited in claim 1 further including a filter processing section that filters each area of the image data based on a predetermined filter coefficient.

Claim 19 (previously presented). An image processing device as recited in claim 1 further including a gamma correcting section that performs gamma correction on each area of the image data using a predetermined gamma correction table.

Claim 20 (previously presented). An image processing as recited in claim 1 further including an error diffusion section that performs error diffusion based on an error diffusion parameter that has been preset for each area of the image data.